

### **REMARKS**

Claims 10-11 have been canceled herein without prejudice. Claims 9 and 12 have been amended herein. Claims 1-8 and 15-20 have been withdrawn. Claims 1-9 and 12-20 are now pending in the Application. No new matter has been added. Entry of the amendment is respectfully requested. Reconsideration is respectfully requested.

Claim 9 has been amended: to be in independent form; to include the subject matter from dependent claim 10 reciting that the cell line is an NSO cell line; and to clarify the wording of the claim. The amendments are believed to have overcome the objection in the Action to claim 9.

Also, claims 10 and 11 have been cancelled in view of the amendment to claim 9. Support for the amendments are found in the original claims and specification. Applicants respectfully submit that amended claim 9 is clear and definite.

### **35 U.S.C. § 102(b) Rejections**

In the Action claim 9 was rejected under 35 U.S.C. § 102(b) as being anticipated by Reiter, et al. (U.S. Patent No. 6,100,061) ("Reiter").

Also in the Action, claims 9-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Keen, et al. (Cytotechnology, 1996) ("Keen").

These rejections are respectfully traversed.

### **Claim 9 with respect to Reiter**

Reiter discloses a stable recombinant cell clone which is stable in serum- and protein-free medium for at least 40 generations, a biomass obtained by multiplying the stable cell clone under serum- and protein-free culturing conditions, and a method of preparing recombinant proteins by means of the

biomass.

Applicants respectfully submit that the cell line obtained by Reiter is the original cell line. i.e the cell line used for obtaining the claimed clone. The product claimed in the amended claims is a variant of the original cell line NSO. The original cell line of the product described by Reiter is CHO. A person of ordinary skill in the art would readily appreciate the functional metabolic differences between CHO and NSO cell lines.

In particular, CHO growth depends on insulin but is independent of cholesterol whereas NSO cell line growth depends on cholesterol but not insulin. In addition, the glycosilation pattern of the proteins expressed by both cell lines is completely different. The same protein expressed in both cell lines would have different biological activity. For example, for the expression of therapeutic immunoglobulin is transcendental the glycosilation pattern and consequently the preferred cell line is NSO cell line.

NSO cell lines generate N-Acetyl as well as N-Glycolil neuraminic acid while CHO cell lines only produce N-Acetyl neuraminic acid for the protein glycosilation. NSO expresses the enzyme N-Acetil-Glucosaminyl transferase 3 which render a particular glycosilation pattern CHO doesn't express this enzyme.

It is therefore respectfully submitted that there are clear functional differences between the cell lines as claimed in the amended claims and those disclosed by Reiter. Thus, Reiter does not disclose each and every element, feature, and relationship of the claimed invention arranged in the manner recited in the claim, as is required to sustain the rejection. Hence, Applicants' claim 9 patentably distinguishes over Reiter. Therefore, it is respectfully submitted that the 35 U.S.C. § 102(b) rejection over Reiter of claim 9 should be withdrawn.

#### **Claim 9 with respect to Keen**

Applicants respectfully submit that the cell line disclosed by Keen also has different metabolic requirements from the cell line claimed in the amended claim. The claimed cell line is adapted to growth in a serum and protein free media. The cell line disclosed by Keen on the other hand requires supplementation with insulin, cholesterol and lipids. The presently claimed cell line grows in a protein and serum free media completely without supplements.

Thus Keen does not disclose each and every element, feature, and relationship of the claimed invention arranged in the manner recited in the claim, as is required to sustain the rejection. Hence, Applicants' claim 9 patentably distinguishes over Keen. Therefore, it is respectfully submitted that the 35 U.S.C. § 102(b) rejection over Keen of claim 9 as well as claims 12-13 which depend therefrom, should be withdrawn.

#### **35 U.S.C. § 103(a) Rejections**

In the Action claim 9-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Keen in view of Cormbet-Ramos, et al. (Int. J. Cancer, 2002, published online 27 August 2002) ("Cormbet-Ramos"), and further in view of Baker, et al. (Biotechnology and Bioengineering, 2001) ("Baker").

These rejections are respectfully traversed. As discussed previously Keen does not disclose or suggest each and every element, feature, and relationship recited in claims 9-13. Further, the secondary references of Crombet-Ramos and Baker do not disclose or suggest all of the recited elements, features, and relationships that are also missing from Keen. Thus the Office has not established a *prima facie* case of obviousness. Therefore, it is respectfully submitted that the 35 U.S.C. § 103(a) rejections of claims 9-10 and 12-14 should be withdrawn.

**Conclusion**

Each of Applicants' pending claims specifically recites features and relationships that are neither disclosed nor suggested in any of the applied art. Furthermore, the applied art is devoid of a prior art reason for combining features of the applied art so as to produce Applicants' invention. Allowance of all of Applicants' pending claims is therefore respectfully requested.

The undersigned will be happy to discuss any aspect of the Application by telephone at the Examiner's convenience.

Respectfully submitted,

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